Work Order III			*105	446*	Page
Item ID: D3183 Revision ID: Item Name: CAP	3-9	A	ссері	*N90004010	O* Setup Start *NS1* Stop *NS2*
Start Date: 8/06/1 Required Date: 8/20/1 Reference:		*100* *100*		Cust Item ID: Customer:	[U,7/
Approvals: Proc. QC:	ess Plan: MUS		Tooling: SPC (Y/N):	Date:	Run Start *NR1* Stop *NR2*
Sequence ID/ Work Center ID	Operation Description	<del>-</del> ·	Set Up/ Run Hours	Tool ID Tool # Plan Code	
Draw Nbr	Revision Nbr				- Cy Cy Camp
D3183	Rev CI				
*100 *100* Hardinge Hardinge CNC Lathe Small	Hardinge CNC LATHE SI  Memo  Turn D3183-9	MALL  Cap as per Folio FA388Deb	0.00 PAS 0.00 <b>40</b> ourr <b>9</b> -89	13/08/06	100 Ø
*110 *110* QC Quality Control	QC2- Inspect parts off mad	chine FAI/FAIB	0.00 PAS 0.00 PAS 9-89	13/08/06	100 \$
120 *120* QC Quality Control	QC8- Inspect parts - secon	d check	0.00	RP 13.8.6	102 \$

NCR: Y	·													
											QA Closed	Date	•	
Work Orde	er:					DISPOSITION				AGAINST D	EPARTM <b>E</b> NT	/PROCESS		
	_			· · ·		Rework	7	Skid-tube Crosstube				Water Jet	Engineering	
Part N	lo.					Scrap	ı	Machining	Small Fab	Pro	d. Eng. Coor.	Quality		
						Use-as-is	1	Therm	noforming	Finishing	Rec/Sto	re/Packaging	Other	
NCR No.						Work Order Update	]		Large Fab	Composite		Supplier		
						<u> </u>								
Root	- }				i	ption of work order update		Initial	Act		Sign &			
Cause	_	Date	Step	Qty	, ,	or Non-conformance	Ct	nief Eng	Descr	iption	Date	Verification	QC Inspector	
Doc/Data			:											
Equip/Tooling				1			Ì							
Operator	_		•											
Material	_													
Setup	_													
Other	_{											i		
Process	_		1											
Supplier	_		İ		•									
Training			:			•								
Unapproved								T CATE	CORV	· · · <del>- ·</del> ·		L	i	
						feneral	AUI	LICAIE	GURT	<del></del>				
Landir	_	<b>ear</b> Bending				Bend		Grain		Г	Ovalized	Г	Pressure/Forced	
	_	bending Centre No	at Cancar	ntric ta	o/s  -	BOM/Route	-	Hardwa	ro	-	Over/Under	tolerance	Temperature/Cure	
<u> </u>	-	Cracks	or concer	itric to	<sup>0/3</sup>  -	Broken/Damaged	-	4	on Incomplete	-	Part Incorre	<del>-</del>	Weld	
	$\overline{}$		Crimnad		-	Burrs	-	1	ions Incomplete/U	Inclear	Part Lost/M	<del>-</del>	Wrong Stock Pulled	
<u> </u>	Crushed/Crimped Cuffs				-	Contamination	-	Mainte	·	-	Part Moved			
Heat Treat				<u> </u>	Countersink	-	Mislabe		<u> </u>	Positioned				
}	Inspection Strip in Tube				<u> </u>	Cut Too Short	$\vdash$	Misread			Power Loss,		Other	
		Ripples in			<u> </u>	Drill Holes	-	Offset	-	L			1	
Torque Waves in Extrusion				Drawing		Out of Calibration			_	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·			

Out of Sequence

Outside Dimensions

DQA:

Date:

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Turning Sequence

Wave/Twist in Tube

Finish

Folio

Work Orde		5446		*10!		Page 3		
Item ID: Revision ID: Item Name:	D3183-9 CAP		A	Accept	*N90004	<b>೧</b> 1೧೧*	Setup Star	וריעו
Start Date: Required Date: Reference:	8/06/13 8/20/13	Start Qty: 100.00 Req'd Qty: 100.00	*100* *100*		Cust Item ID: Customer:			
Approvals:	Process Pla	π:	Date:	Tooling: SPC (Y/N):	Date:		Run Star Stop	"INK1"
Sequence ID/ Work Center II 130 *130*	)	Operation Description Identify as per dwg & Stoo	:k Location: <u>572,3</u> 5 <i>B</i>	Set Up/ Run Hours	Tool ID Tool	Code Q	ccept Reject ety Qty	Reject Insp. Number Stamp
Packaging Packaging		Memo		0.00			101 x 11/	P. D. 13-08-7
140		QC21- Final Inspection - V	Work Order Release	0.00				
*140* QC Quality Control		Memo		0.00		0,	MCJ 13- 8(13-8-7	90-80
								! !

									DQA:	Date:			
NCR: Yes	s / No				WORK ORDER NON-C	ONFOR	MANCE / U	PDATE	QA Closed	: Date:			
Work Order:					DISPOSITION	DISPOSITION				AGAINST DEPARTMENT/PROCESS			
Part No.					Rework Scrap		Skid-tube Machining	Crosstube Small Fab	Pro	Water Jet od. Eng. Coor.	Engineering Quality		
NCR No.	-				Use-as-is Work Order Update	Ther	moforming Large Fab	Finishing Composite .	Rec/Sto	re/Packaging Supplier	Other		
Root				Descri	ption of work order update	Initial	Δ	ction	Sign &				
Cause	Date	Step	Qty		or Non-conformance	Chief En	Des	cription	Date	Verification	QC Inspector		
Doc/Data									·				

#### **FAULT CATEGORY Landing Gear** General Bend Ovalized Pressure/Forced Grain Bending BOM/Route Hardware Over/Under tolerance Temperature/Cure Centre Not Concentric to O/S . Broken/Damaged Inspection Incomplete Part Incorrect Weld Cracks Wrong Stock Pulled Crushed/Crimped Instructions Incomplete/Unclear Part Lost/Missing Burrs Cuffs Maintenance Part Moved Contamination Countersink Mislabeled Positioned Wrong Heat Treat Other Cut Too Short Power Loss/Surge Inspection Strip in Tube Misread Drill Holes Ripples in Bend Offset Out of Calibration Torque Waves in Extrusion Drawing Out of Sequence Turning Sequence Finish Wave/Twist in Tube Folio Outside Dimensions

Equip/Tooling
Operator
Material
Setup
Other
Process
Supplier
Training
Unapproved

Work Order ID: 105446

Parent Item:

103183-9

Parent Item Name: CAP

\*105446\*

\*D3183-9\*

Start Date: 8/06/13

Required Date: 8/20/13

Start Qty: 100.00

Required Qty: 100.00

Comments:

A 06.05.03 New issue KJ

Component Item ID/ Item Name	Replacement ltem 1D	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	" Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status	
MDELRINR1.000		Purchased	No			100	f	20.4900	0.0333	3.505263				
*MDFI RIN	JR1 nnd	)*				 			**		ONS	13/	1866	

Delrin Round Bar I"

Location MAT018 125251 حسب

20.49 20.49

Loc Oty

Loc Code

										DQA:	Date:		
NCR: Y	es /	No _				WORK ORDER NON-C	CONFOR	MANCE / U	PDATE	QA Closed:	Date:		
Work Orde	r:			_	· <del>-</del>	DISPOSITION		AGAINST DEPARTMENT/PROCESS					
Part N	Part No.  NCR No.					Rework Scrap Use-as-is Work Order Update	4 8	Skid-tube Crosstube  Machining Small Fab  Thermoforming Finishing  Large Fab Composite			Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other	
Root					Descri	ption of work order update	Initial	Α	ction	Sign &			
Cause	D	ate	Step	Qty	(	or Non-conformance	Chief Eng	Des	cription	Date	Verification	QC Inspector	
Doc/Data							1						
Equip/Tooling		ļ											
Operator													
Material		1					1						
Setup										1			
Other										:			
Process													
Supplier													
Training													
Unapproved	$\Box$						}						
						F.	<b>AULT CATI</b>	GORY					

Landing G	iear	General			_	_
	Bending	Bend	Grain		Ovalized	Pressure/Forced
	Centre Not Concentric to O/S	BOM/Route	Hardware		Over/Under tolerance	Temperature/Cure
	Cracks	Broken/Damaged	Inspection Incomplete		Part Incorrect	Weld
	Crushed/Crimped	Burrs	Instructions Incomplete/Unclear		Part Lost/Missing	Wrong Stock Pulled
	Cuffs	Contamination	Maintenance		Part Moved	 _
	Heat Treat	Countersink	Misłabeled	Г	Positioned Wrong	_
	Inspection Strip in Tube	Cut Too Short	Misread		Power Loss/Surge	Other
	Ripples in Bend	Drill Holes	Offset			
	Torque Waves in Extrusion	Drawing	Out of Calibration			
	Turning Sequence	Finish	Out of Sequence			
	Wave/Twist in Tube	Folio	Outside Dimensions			

DART AEROSPACE LTD	Work Order:	105446
Description: Cap	Part Number:	D3183-9
Inspection Dwg: D3183 Rev: C1		Page 1 of 1

## FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

Drawing	<u> </u>	Actual		1	Method of	
Dimension	Tolerance	Dimension	Accept	Reject	Inspection	Comments
Ø0.830	+/-0.005	. 830	/		VERN	PHO-12
Ø0.720	+/-0.002	. 719	~		1c	1.
Ø0.747	+/-0.001	. 746			14	11
R0.010	+/-0.010	-010	/		Rad 6	
R0.031	+/-0.010	.025	/		Rad 6	
0.199	+/-0.001	. 199	1.		VERN	P4D-12
0.276	+/-0.010	. 276	/		ŀ	1,
0.039	+/-0.010	. 039	/		Į.	
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			L			

Measured by: 40 Audited by: Prototype Approval: N/A

Date: 13/08/06

Date: 7-8-6

Date: N/A

ŀ	Rev	Date	te Change	Revised by	Approved
	Α	04.04.20	4.20 New Issue (P/O D3183-045)	KJ/RF	1
	В	06.03.09	3.09 Dimension Ø0.830 was Ø0.850	KJ/JLM A	Cul
				<del>ام تــــــــــــــــــــــــــــــــــــ</del>	





DESIGN	4	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA						
CHECK	#-	APPROVED	DRAWING NO. D3183	REV. C					
 DATE	04.0	02.17	BRACKET ASSEMBLY	SCALE 1:1					
Α	0	3.01.24	NEW ISSUE						
В	0	3.06.17	REMOVE BEARING; 1.012 WS 0.88	2					
С	,0	4.02.17	ADD -045/-9; 0.182 WAS 0.431						
	7 d								

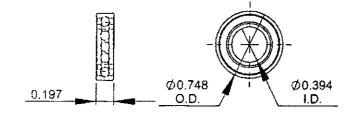
PELEASED

DEO ATTACHED

1 C1 1 4 1 04.11.09 10.830 WAS 0.850 D3121-21 BOLT (1)

D3183-045 BEARING ASSEMBLY (1) D3121-21 BOLT (1) D3183-045 BEARING ASSEMBLY (1) D3183-1 BRACKET FOR -041 (SHOWN) OR D3183-2 BRACKET FOR -042 (OPPOSITE) OR D3183-3 BRACKET FOR -043 (SIMILAR) D3183-4 BRACKET FOR -044 (SIMILAR)

D3183-041 BRACKET ASSEMBLY (SHOWN)
D3183-042 BRACKET ASSEMBLY (OPPOSITE)
D3183-043 BRACKET ASSEMBLY (SIMILAR)
D3183-044 BRACKET ASSEMBLY (SIMILAR)



### **D3183-5 BEARING:** SPECIFICATION CONTROL DRAWING

- 1) SINGLE ROW, DEEP GROOVE, CONRAD TYPE, SHIELDED 2) POSSIBLE SUPPLIER: NSK P/N 6800ZZ
- 3) ALL DIMENSIONS ARE IN INCHES

# 0.052 ±0.005 Ø0.600 +0.005 Ø0.394 0.000 I.D O.D.

### **D3183-7 WASHER**

- 1) MATERIAL: AISI 303 ROUND BAR (M303R) **ANNEALED**
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) TOLERANCES ARE PER DART QSI 018 **UNLESS OTHERWISE NOTED**
- 4) ALL DIMENSIONS ARE IN INCHES

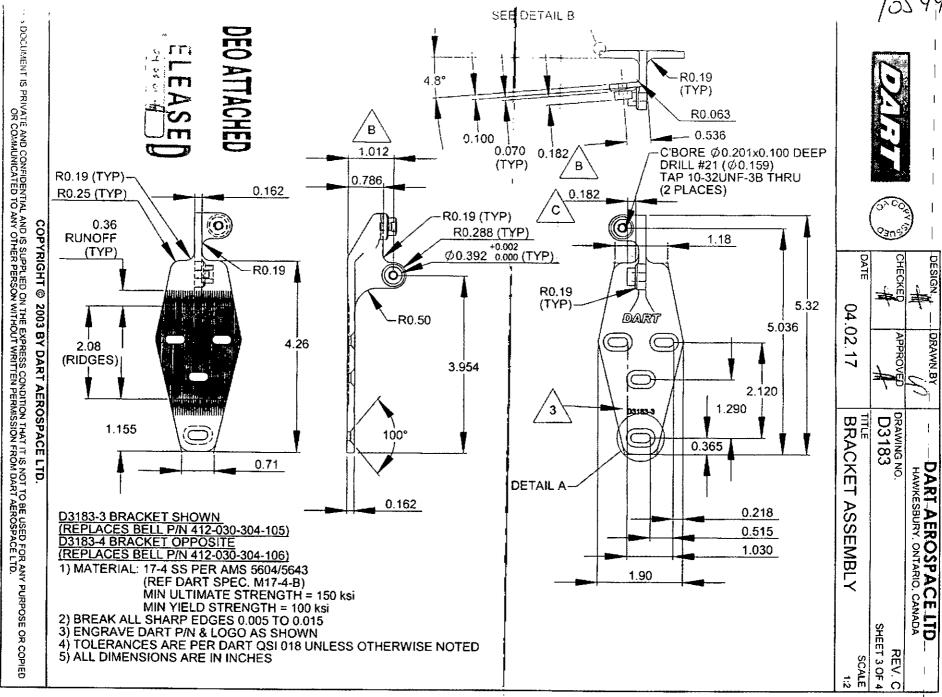
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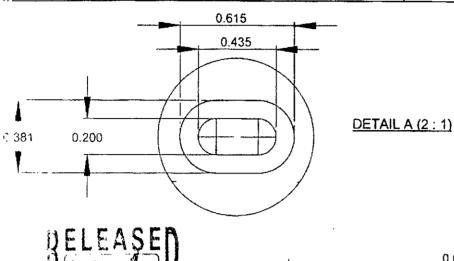
5.32 04.02.17 5.036 2,120 1.290 DRAWING NO. BRACKE DART-AEROSPACE\_LTD HAWKESBURY, ONTARIO, CANADA ASSEMBLY 0.218 0.515 1.030



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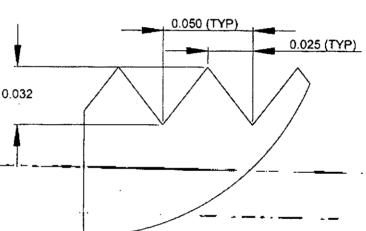
DESIGN	DRAWN BY	DART AEROSPACE HAWKESBURY, ONTARIO, CA	
CHECKED	APPROVED	DRAWING NO. D3183	REV. C SHEET 4 OF 4
DATE 04.	02.17	BRACKET ASSEMBLY	SCALE 1:1

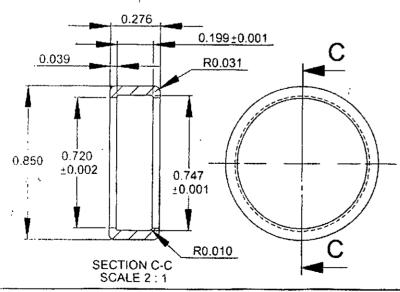


HELEASED

**DEO ATTACHED** 

**DETAIL B (20:1)** 





### D3183-9 CAP

- 1) MATERIAL: DELRIN ROD, Ø1.00 (REF DART SPEC. M-DELRIN-R1.00)
  2) TOLERANCES ARE PER DART QSI 018
- **UNLESS OTHERWISE NOTED**
- 3) ALL DIMENSIONS ARE IN INCHES

### D3183-045 BEARING ASSEMBLY

1) ASSEMBLE D3183-5 BEARING AND D3183-9 CAP

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105446

	1				**************************************		
DRAWING	NO. TITLE		/REV.C1	DART AEROSPACE LTD	D.E.O. NO.	SHEET NO.	SCALE
D3183	BRAC	KET ASSEMBLY		ENGINEERING ORDER	D3183-C1-1	SHEET 1 OF 1	NTS
DRAWN	qp_	CHECKED	4	MFG. APPR. AF	PPROVED AN	DE APPR.	
DATE	10.05.14	DATE 10	0.06.30	DATE (0.06.30 DA	ATE 10/0:0/30	DATE (0/06/30	

**D3183-5 BEARING** 

ADD POSSIBLE SUPPLIER: KML P/N 6800-ZZ

BASIC LOAD RATING REQUIREMENT:

Cr = 1720 N (386 lb) MIN [DYNAMIC]

Cor = 840 N (188 lb) MIN [STATIC]

**REF PAR 10-012** 

RELEASED 2010 -07-22

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